

FOREST CONTROL

by CONTINUOUS INVENTORY

"Today I have grown taller from walking
with the trees."

...Karle Wilson

Milwaukee, Wis. August, 1963 No. 113

A DEFINITION OF 1811

A forest is a certain territory or circuit of woody grounds and pastures, known in its bounds and privilege, for the peaceable being and abiding of wild beasts, and fowls of the forest, chase and warren, to be under the king's protection for his princely delight: replenished with beasts of venery or chase and great coverts of vert for succor of said beasts; for the preservation whereof there are particular laws, privileges and officers belonging thereof.

From A Modern Law Dictionary
by Giles Jacob

The first American and second
London edition. Printed by
P. Byrne of Philadelphia

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A BETTER WAY TO USE PORT-A-PUNCH CARDS

A quarter million Port-A-Punch cards have been used during the past four years by industrial pulp and timber companies in the North Central Forest Region. A number of improvements in the design and application of the cards have gradually developed through use. Due largely to industrial application of Port-A-Punch principles to the tally of trees in the woods, these improvements should be of interest to the readers of the CFI newsletter.

The most helpful changes in card design have been the complete elimination of 80-column or key punch data from the 40-column PAP card and a rearrangement of card fields to keep repetitive information in adjacent columns.

A remodeled Port-A-Punch template has also been developed. Suggested and first applied by Foresters Jack Tucker and Ivan Kronberg of the Oliver Mining Company, the new template merely blocks out the unneeded openings by a simple process explained in subsequent pages.

The supplier of these cards, templates and tally boards is IBM but there are undoubtedly others who furnish corresponding goods and services. Our experience has been concentrated with companies using data processing methods which permit the sorting, interpreting and 80-column card reproduction of Port-A-Punch cards. There has been little opportunity to work with other producers of cards for direct field tally and machine manipulation.

X-PUNCH: BUTT LOG AND BUTT OFF LENGTH

[illegible]

NEW HYBRID

KALINOSKI, J. AND L. H. CHEN. 1993. LONG-TERM EFFECTS OF A FLOOD CONTROL PROJECT ON THE HABITAT OF THE AMERICAN BULL TURTLE (*APLODONTOMYDUS TERRAPIN*) IN THE MISSISSIPPI RIVER. *WETLANDS* 13:105-114.

DETAIL

TREE

LOCAL WOODS. 1943

CHIEF CHANGES IN PAP CARD USE AND DESIGN

1. Previous records are reproduced by machine into prescored positions within the gray or shaded fields for the first remeasurement.
2. Present records are field punched with stylus into the white or unshaded fields for the first remeasurement.
3. 80-column punches are not reproduced into the PAP card at any time or for any purpose.
4. The fields for plot number, tree number and species, which are standard for both measurements, appear only once in each PAP card.

ADVANTAGES OF THE CHANGES IN PAP CARD DESIGN AND USE

1. Errors made at the previous measurement may be corrected in the woods with Brady correction seals and the stylus.
2. The PAP card may be completely repunched by stylus if errors are too numerous for correction seals.
3. Direct comparison of previous and present measurements is facilitated by the adjacent fields for repeated records.
4. Interpretation of previous records is of little importance when repeated measurements are punched into adjacent fields.
5. There is little excuse for the tallyman's failure to compare repetitive records in multiple measurement PAP cards.
6. Since there are no 80-column punches in the PAP field card, and it is never key punched later, there is no risk of having the prescored positions punched out by the read side of the machine.
7. It is unnecessary to make any longhand notes on the PAP card to prepare for subsequent corrections. All changes and corrections are stylus-punched in the woods.
8. Multiple measurement PAP cards provide a continuing opportunity for the discovery and immediate correction of previous errors.
9. The first PAP card may be used for a subsequent measurement if the cards are carefully stored under pressure in a dry place during the measurement interval.

GENERAL COMMENTS ON PAP CARD USE

No serious limitations with the use of PAP cards have been experienced in the sorter, reproducing punch or interpreter. Because the cards are softer and more absorbent than 80-column cards, they must be held longer in the machine room for humidity adjustment before reproducing or sorting.

We have had no difficulty reproducing from one PAP card into another or from an 80-column card into a PAP card. In either case the reproduction is made directly into the prescored positions. Never let a machine man tell you this cannot be done. The slight sliver of the prescored card left around the edge of the machine punched hole has caused us no trouble whatsoever in subsequent card handling.

The use of Aqua or water-proofed card stock will be reported upon early next year. There has been little experience with this stock in the woods and none in the machines. One case will be completed and thoroughly studied in this Region late in the fall of 1963. Other Regions report the successful use of water-proofed or Aqua stock.

AN IMPROVED TEMPLATE FOR PORT-A-PUNCH BOARDS

Punching tree records with a stylus through a template, to port-a-punch cards beneath, is a most satisfactory method of field tally. An additional advantage is the possibility of direct machine handling the punched cards, thus saving the time and cost of key punching.

One of the greatest conveniences of PAP cards is in the check sorting which may be done during the course of the field project. From these sorts early errors are corrected after which fewer mistakes are made by the cruisers and tally takers. A share of the punching errors is the result of having many unused punch positions in the template.

The ordinary PAP template purchased from IBM contains 960 small holes for the entrance of the stylus. There is an equal number of prescored positions in the card beneath the template. Very few of these openings and prescored positions are needed for the standard CFI case.

Tree detail cards require not more than 250 template holes for the first or second measurements. A corresponding situation exists for the plot master cards. It seems very important therefore to block out unnecessary template openings to reduce punching errors.

It is possible that ultimately IBM will furnish this service, constructing gigs for special template layouts. Until this can be done at reasonable cost, temporary measures are proposed.

A number of experimental methods for blocking template holes have been tried and found wanting. We have punched plastic auto-positive prints but in the process they bent. The underside of the plastic was rough and it became difficult to insert PAP cards beneath it. Making template holes by drill press or lathe without a gig was inaccurate and unsatisfactory. We also tried crosshatching the PAP card to designate unused prescored positions. This cluttered up the card, causing confusion. Furthermore, it did not prevent mispunching since the templates still contained the full complement of 960 holes.

This season we have pasted Avery Correction Tape over the template holes not needed. Sprayed twice with Blair Spray-Fix, these templates with tape show every prospect of lasting a field season - every prospect except one. Mosquito dope may loosen the tape or schmeer the fixative. We have had little experience on this score. However, there is now no question of the accuracy of the stylus holes in the template and fewer mispunches have been found. If these templates wear out during the season they are easily replaced overnight. As the plates show, the layout is neat and professional looking, and every template hole is exactly in position every time a new card is slipped under it.

CAL STOTT
RICHARD SMITH

Foresters
Region 9 - U. S. Forest Service

IBM PORT-A-PUNCH

GENUINE ENTERPRISES, INC.

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PLAT MASTER

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IBM PORT-A-PUNCH

ACKNOWLEDGMENTS